

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/539,208

Source: IFwp

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/539,208

DATE: 10/12/2006

TIME: 09:26:31

Input Set : A:\B&B-135.ST25.txt
 Output Set: N:\CRF4\10122006\J539208.raw

3 <110> APPLICANT: Raab, David
 4 Graf, Marcus
 5 Notka, Frank
 6 Wagner, Ralf
 8 <120> TITLE OF INVENTION: Method and Device for Optimizing a Nucleotide
 Sequence for the
 9 Purpose of Expression of a Protein
 11 <130> FILE REFERENCE: B&B-135
 13 <140> CURRENT APPLICATION NUMBER: 10/539,208
 14 <141> CURRENT FILING DATE: 2005-06-17
 16 <150> PRIOR APPLICATION NUMBER: PCT/EP03/14850
 17 <151> PRIOR FILING DATE: 2003-12-23
 19 <150> PRIOR APPLICATION NUMBER: DE 10260805.9
 20 <151> PRIOR FILING DATE: 2002-12-23
 22 <160> NUMBER OF SEQ ID NOS: 32
 24 <170> SOFTWARE: PatentIn version 3.3
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 435
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Homo sapiens
 31 <400> SEQUENCE: 1
 32 atgtggctgc agagcctgct gctcttgggc actgtggcct gcagcatctc tgcacccggcc 60
 34 cgctcgccca gccccagcac gcagccctgg gagcatgtga atgcccattca ggaggcccg 120
 36 cgtctccctga acctgagtag agacactgct gctgagatga atgaaacagt agaagtcatc 180
 38 tcagaaaatgt ttgacacctca ggagccgacc tgcctacaga cccgcctgga gctgtacaag 240
 40 cagggcctgc ggggcagcct caccaagctc aaggggccct tgaccatgtat ggccagccac 300
 42 tacaagcagc actgcctcc aaccccgaa acttcctgtg caacccagat tatcacctt 360
 44 gaaagtttca aagagaacct gaaggactt ctgcttgtca tcccctttga ctgctggag 420
 46 ccagtccagg agtag 435
 49 <210> SEQ ID NO: 2
 50 <211> LENGTH: 435
 51 <212> TYPE: DNA
 52 <213> ORGANISM: Homo sapiens
 54 <400> SEQUENCE: 2
 55 atgtggctgc agagcctgct gctgctggga acagtggcct gtacgtctc tgccctgtcc 60
 57 agaagcccta gcccacgtcac acagccttgg gagcacgtga atgcccattca ggaggccagg 120
 59 agactgctga acctgagcag agatacagcc gcccggatga acgagaccgt ggaggtgatc 180
 61 agcgagatgt tcgacacctca ggagccatca tgcctgcaga cccggctgga gctgtataag 240
 63 cagggcctga gaggctctt gaccaagctg aaggggccccc tgacaaatgtat ggccagccac 300
 65 tacaagcagc actgcctcc taccctttag acaagctgctg ccacccagat catcacctt 360
 67 gagagcttca aggagaacct gaaggactt ctgctggat tcccctttca ttgctggag 420
 69 cccgtgcagg agtag 435
 72 <210> SEQ ID NO: 3
 73 <211> LENGTH: 489

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74 <212> TYPE: DNA
 75 <213> ORGANISM: Homo sapiens
 77 <400> SEQUENCE: 3
 78 atgagaattt ccaaaccaca tttgagaagt atttccatcc agtgctactt gtgtttactt 60
 80 ctaaacagtc attttctaac tgaagctggc attcatgtct tcattttggg ctgtttcagt 120
 82 gcaggccttc ctaaaacaga agccaactgg gtgaatgtaa taagtgattt gaaaaaaaaatt 180
 84 gaagatctta ttcaatctat gcattatgtat gctactttat atacggaaag tgatgttcac 240
 86 cccagttgca aagtaacacgc aatgaagtgc tttctcttgg agttacaagt tatttcaatt 300
 88 gagtcggag atgcaagtat tcatgataca gtagaaaaatc tgatcatcct agcaaacaac 360
 90 agtttgcattt ctaatgggaa tgtaacagaa tctggatgca aagaatgtga ggaactggag 420
 92 gaaaaaaaaata ttaaagaattt tttgcagagt tttgtacata ttgtccaaat gttcatcaac 480
 94 acttcttag 489
 97 <210> SEQ ID NO: 4
 98 <211> LENGTH: 489
 99 <212> TYPE: DNA
 100 <213> ORGANISM: Homo sapiens
 102 <400> SEQUENCE: 4
 103 atgcggatca gcaagccccca cctgaggagc atcagcatcc agtgctaccc gtgcctgctg 60
 105 ctgaacagcc acttcctgac agaggccggc atccacgtgt ttatcctggg ctgctctct 120
 107 gcccgcctgc ctaagacaga ggcacactgg gtgaacgtga tcagcgaccc gaagaagatc 180
 109 gaggacctga tccagagcat gcacatcgac gccaccctgt acacagagag cgacgtgcac 240
 111 cctagctgta aggtgaccgc catgaagtgc ttcctgctgg agctgcaggat gatcagcctg 300
 113 gagagccgc atgcccagcat ccacgcacacc gtaggagaacc tgatcatcct ggcacaaac 360
 115 agcctgagca gcaacggcaa tttgaccgc agcggctgca aggagtgtga ggagctggag 420
 117 gagaagaaca tcaaggagtt cctgcagagc ttcgtgcaca tctgtcagat gttcatcaac 480
 119 accagctag 489
 122 <210> SEQ ID NO: 5
 123 <211> LENGTH: 426
 124 <212> TYPE: DNA
 125 <213> ORGANISM: Mus musculus
 127 <400> SEQUENCE: 5
 128 atgtggctgc agaatttact tttcctggc attgtggtct acagcctctc agcaccacc 60
 130 cgctcaccaca tcactgtcac ccggccttgg aagcatgttag aggccatcaa agaaggccctg 120
 132 aaccccttgg atgacatgcc tttcacattt aatgaagagg tagaagtcgt ctcttaacgag 180
 134 ttctccttca agaagctaac atgtgtcag acccgccctga agatattcga gcagggtcta 240
 136 cggggcaatt tcaccaaact caagggcgcc ttgaacatga cagccagcta ctaccagaca 300
 138 tactcccccc caactccgga aacggactgt gaaacacaag ttaccaccta tgcggatttc 360
 140 atagacagcc ttaaaacctt tctgactgat atcccccttg aatgaaaaaaaa accaggccaa 420
 142 aaatag 426
 145 <210> SEQ ID NO: 6
 146 <211> LENGTH: 426
 147 <212> TYPE: DNA
 148 <213> ORGANISM: Mus musculus
 150 <400> SEQUENCE: 6
 151 atgtggctgc agaacctgtgt ttccctggc atcgtgggtgt acagcctgag cggccacc 60
 153 aggagccccca tcaccgtcac caggccctgg aagcacgtgg aggccatcaa ggaggccctg 120
 155 aaccccttgg acgacatgcc cgtgaccctg aacgaggagg tggagggtggt gagcaacgag 180
 157 ttccatgtca agaagctgac ctgcgtgcag accaggctga agatcttcga gcaggccctg 240
 159 agggcaact tcaccaagct gaagggcgcc ctgaacatga cogccagcta ctaccagacc 300

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161 tactgcccccc ccaccccccga gaccgactgc gagaccagg tgaccaccta cgccgacttc 360
163 atcgacagcc tgaagacctt cctgaccgac atccccttcg agtgcagaagaa gccccggccag 420
165 aagtag 426
168 <210> SEQ ID NO: 7
169 <211> LENGTH: 279
170 <212> TYPE: DNA
171 <213> ORGANISM: Mus musculus
173 <400> SEQUENCE: 7
174 atgaaggctcc accactgc ccttgcgtt cttctctgtt ccatgacact ctgcaaccaa 60
176 gtcttcctcag cgccatatgg agctgacacc ccgactgcct gctgcttcctc ctacagccgg 120
178 aagattccac gccaattcat cgttgactat tttgaaacca gcagcctttg ctcccagccca 180
180 ggtgtcattt tcctgactaa gagaaaccgg cagatctgcg ctgactccaa agagacctgg 240
182 gtccaagaat acatcaactga cctggaactg aatgcctag 279
185 <210> SEQ ID NO: 8
186 <211> LENGTH: 279
187 <212> TYPE: DNA
188 <213> ORGANISM: Mus musculus
190 <400> SEQUENCE: 8
191 atgaagggtga gcaccacagc tctggctgtt ctgctgtca ccatgaccct gtgcaacccag 60
193 gtgttcagcg ctcccttacgg cgccgatacc cctacagccct gctgcttcctc ctacagccgg 120
195 aagatccccca ggcagttcat cgttgactac ttcgagacca gcagcctgtt ttctcagccc 180
197 ggcgtgtatct tcctgaccaa gggaaacaga cagatctgcg ccgacagccaa ggagacatgg 240
199 gtgcaggagt acatcacccga cctggagctg aacgcctag 279
202 <210> SEQ ID NO: 9
203 <211> LENGTH: 42
204 <212> TYPE: DNA
205 <213> ORGANISM: Artificial Sequence
207 <220> FEATURE:
208 <223> OTHER INFORMATION: Optimal DNA sequence corresponding to
hypothetical amino acid
209 sequence.
212 <220> FEATURE:
213 <221> NAME/KEY: misc_feature
214 <222> LOCATION: (42)..(42) /
215 <223> OTHER INFORMATION: n' = a, t, g, or c
217 <400> SEQUENCE: 9
W--> 218 garcarttya thathaaraa yatgattyath athaaraayg cn 42
221 <210> SEQ ID NO: 10
222 <211> LENGTH: 14
223 <212> TYPE: PRT
224 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: Hypothetical amino acid sequence.
229 <400> SEQUENCE: 10
231 Glu Gln Phe Ile Ile Lys Asn Met Phe Ile Ile Lys Asn Ala
232 1 5 10
235 <210> SEQ ID NO: 11
236 <211> LENGTH: 9
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence

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Input Set : A:\B&B-135.ST25.txt
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240 <220> FEATURE:
241 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
243 <400> SEQUENCE: 11
244 garcartty 9
247 <210> SEQ ID NO: 12
248 <211> LENGTH: 9
249 <212> TYPE: DNA
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
255 <400> SEQUENCE: 12
256 carttyath 9
259 <210> SEQ ID NO: 13
260 <211> LENGTH: 9
261 <212> TYPE: DNA
262 <213> ORGANISM: Artificial Sequence
264 <220> FEATURE:
265 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
267 <400> SEQUENCE: 13
268 ttyathath 9
271 <210> SEQ ID NO: 14
272 <211> LENGTH: 9
273 <212> TYPE: DNA
274 <213> ORGANISM: Artificial Sequence
276 <220> FEATURE:
277 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
279 <400> SEQUENCE: 14
280 athathaar 9
283 <210> SEQ ID NO: 15
284 <211> LENGTH: 9
285 <212> TYPE: DNA
286 <213> ORGANISM: Artificial Sequence
288 <220> FEATURE:
289 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
291 <400> SEQUENCE: 15
292 athaaraay 9
295 <210> SEQ ID NO: 16
296 <211> LENGTH: 9
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
303 <400> SEQUENCE: 16
304 aaraayatg 9
307 <210> SEQ ID NO: 17
308 <211> LENGTH: 9
309 <212> TYPE: DNA

310 <213> ORGANISM: Artificial Sequence
312 <220> FEATURE:

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313 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
315 <400> SEQUENCE: 17
316 aayatgatty 9
319 <210> SEQ ID NO: 18
320 <211> LENGTH: 9
321 <212> TYPE: DNA
322 <213> ORGANISM: Artificial Sequence
324 <220> FEATURE:
325 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
327 <400> SEQUENCE: 18
328 atgattyath 9
331 <210> SEQ ID NO: 19
332 <211> LENGTH: 9
333 <212> TYPE: DNA
334 <213> ORGANISM: Artificial Sequence
336 <220> FEATURE:
337 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
339 <400> SEQUENCE: 19
340 ttyathath 9
343 <210> SEQ ID NO: 20
344 <211> LENGTH: 9
345 <212> TYPE: DNA
346 <213> ORGANISM: Artificial Sequence
348 <220> FEATURE:
349 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
351 <400> SEQUENCE: 20
352 athathaar 9
355 <210> SEQ ID NO: 21
356 <211> LENGTH: 9
357 <212> TYPE: DNA
358 <213> ORGANISM: Artificial Sequence
360 <220> FEATURE:
361 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
363 <400> SEQUENCE: 21
364 athaaraay 9
367 <210> SEQ ID NO: 22
368 <211> LENGTH: 9
369 <212> TYPE: DNA
370 <213> ORGANISM: Artificial Sequence
372 <220> FEATURE:
373 <223> OTHER INFORMATION: Combination DNA Sequence for amino acid SEQ ID
NO: 10.
376 <220> FEATURE:
377 <221> NAME/KEY: misc_feature
378 <222> LOCATION: (9)...(9)
379 <223> OTHER INFORMATION: n = a, t, g, or c
381 <400> SEQUENCE: 22
W--> 382 aaraaygcn 9

385 <210> SEQ ID NO: 23
386 <211> LENGTH: 238

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/539,208

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FYI
Input Set : A:\B&B-135.ST25.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; N Pos. 42
Seq#:22; N Pos. 9
Seq#:24; N Pos. 10
Seq#:26; N Pos. 7
Seq#:27; N Pos. 7
Seq#:28; N Pos. 10
Seq#:29; N Pos. 7
Seq#:30; N Pos. 8
Seq#:31; N Pos. 9
Seq#:32; N Pos. 10

VERIFICATION SUMMARY
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Input Set : A:\B&B-135.ST25.txt
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L:218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:382 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:472 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:502 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:520 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:538 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:556 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:574 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
L:610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0